

# GLOSSARY

## GENERAL RAILWAY DEFINITIONS AND COMMON RAILWAY TERMS

### A

**AAR:**

See Association of American Railroads

**Adjacent Track:**

In relation to excepted track and for the purposes of the Track Safety Standards, any track or tracks next to a track that is designated as an excepted track. Any tracks or tracks with centerlines that are 30 feet or closer to the excepted track in question are considered as adjacent and speeds on those tracks must not exceed 10 m.p.h.

**Adjustment, Rail:**

A process whereby the neutral temperature of continuous welded rail (CWR) is raised or lowered through the removing or adding of rail.

**Administrator:**

The chief officer of the Federal Railroad Administration. That person has the authority to issue safety regulations and other emergency directives.

**Advanced Signal:**

A fixed signal used in connection with one or more signals to govern the approach of a train or engine to such signal.

**Advanced Train Control System: (ATCS)**

Term referring to the next generation of train control. Aspects of control include accurate train location, train and locomotive monitoring and reporting, computerized analysis and track orders, and automatic order enforcement.

**Adzing Machine:**

Portable power-operated machine designed to adz (smooth) the rail seat on ties to provide proper bearing for rail or tie plates.

**AEI:**

See Automatic Equipment Identification System

**“A” End:**

In a railway freight car, the end that does not have the brake handle; opposite to the “B” end – SEE “B” End.

**Air Dump Car:**

Hopper Car with air dumping capabilities.

**Alinement [or alignment]:**

The position of the track or rail in the horizontal plane expressed as tangent or curve.

**Angle Cock:**

An appliance used for the purpose of opening or closing brake pipe on ends of cars, rear ends of tenders, and front ends of switch engines so equipped. Provision is made for the supporting hose at proper angle.

**Antisplitting Iron:**

A piece of steel strip, beveled on both sides at one edge, and bent to a desired shape, for application by driving into the end (cross section) of a tie or timber to control its splitting.

**Approach Track:**

In signaling, the section of track on the approach side of a signal which is equipped with a circuit to detect the arrival of a train and transmit its presence to the controlling circuits of the signal and its associated route. Used to lock a route and prevent it from being altered once a train has approached within a safe braking distance, known as approach control. This prevents the route being changed at a time when the train could run onto it and be derailed.

Also use to clear signals normally maintained at danger until a train has approached within a given distance. This distance is calculated to ensure the locomotive engineer sees a red signal as he approaches. This has the effect of causing the locomotive engineer to reduce train speed to a required level, at which point the signal will clear.

## GLOSSARY

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### U

**Unbalanced:**

The superelevation in a curve that is less than a calculated value that will otherwise equally distribute onto both rails the dynamic force of trains that are traveling at the maximum authorized speed.

**Unbalance Speed:**

Traveling through a curve faster than balance speed. This may also be expressed as the curve being under elevated for the speed. The amount of reduction in elevation from balanced can be as much as 3 inches for conventional equipment.

**Undercutter:**

Production machine that removes the ballast from the track in one continuous operation.

**Under balanced:**

See unbalanced.

**Uniform Code of Operating Rules:**

An operating rules book formerly used in the U.S.A.

**Unit Train:**

A freight train consisting of carloads of the same commodity moving from origin to one destination, on one day from one shipper to one consignee on one bill of lading.

### V

**V-max:**

The maximum speed, based on a mathematical formula, permitted on a curve based on the average curvature and average superelevation.

**Variation (Crosslevel):**

The change in crosslevel between two points exactly 31 feet apart in a "short spiral." [see definition of short spiral]

### W

**Waivers:**

See exemption.

**Waters of the U.S.:**

Regulated by the U.S. Army Corps of Engineers and sometimes state and local authorities they include: (1) Waters used for interstate or foreign commerce, (2) all other waters including lakes, rivers, streams, mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa takes, or natural ponds, (3) impoundments, (4) tributaries of waters of the U.S., (5) the

territorial seas, and (6) wetlands adjacent to waters.

**Warp:**

See Difference-in-cross-level

**Welded Rail:**

Two or more rails welded together.

**Wetlands:**

The transitional land between the terrestrial and aquatic environment where the water table is usually at or near the surface, or the land is covered by shallow water.

**Wheel Impact Load Detector (Wild):**

A device found in some Hot Box Detectors or as stand alones, which measure excessive wheel impact on rail.

**Wig Wag:**

A reference to the motion of lights on railway, vehicle-crossing signals.

**Willful Violation:**

To intentionally circumvent or ignore a regulatory safety requirement.

**Wing Rail:**

See "Frog: Wing Rail."

**Wing Wheel Riser:**

See "Frog: Wing Wheel Riser."

**Wood Trestle:**

A wood structure composed of bents supporting stringers, the whole forming a support for loads applied to the stringers through the deck.

**Work Train:**

A train engaged in railway maintenance or repair work.

**Written Authorization:**

The formal procedure where a person is designated in a document generated by a railroad to conduct certain safety related functions such as track inspection or maintenance of track under traffic conditions.

**Wye Track:**

See "Track: Wye."

### Y

**Yard:**

A system of tracks within defined limits provided for making up trains, storing cars, and other purposes, over which movements not authorized by time table or by train-order may be made,